

- Food
- Food Additive
- Cosmetic
- Quasi-drug

JAPAN · USA

Patent Technology

GMP

Technical  
Data

## 『 Chicken Anserine & Carnosine (Imidazole Dipeptide) 』

### Less Odor Ingredients with Unique Technology



Imidazole dipeptide is extracted from chicken. It is characterized by low odor due to a special extraction method using a patented manufacturing method. It is said that the secret to the ability of migratory birds and migratory fish to continue exercising forever is imidazole dipeptide in their muscles. An amino acid with an imidazole group is called histidine, and the combination of these is an imidazole dipeptide.

Typical examples include carnosine, which is common in birds and mammals, anserine, which is common in fish, and balenine, which is common in whales.

#### Expected Function & Recommended Dosage

	As Imidazole Dipeptide	As Product (50% powder)	As Product (40% powder)	As Product (20% powder)	As Product (10% powder · liquid)
Antifatigue · Removing active oxygen · Antiaging · Improving athletic performance	200~400	400~800	500~1,000	1,000~2,000	2,000~4,000

◎ Life style related disease prevention, etc.

(Unit: mg/day)

#### Display Name Example

50% powder	40% powder	20% powder	10% powder	10% liquid
Chicken Extract, Dextrin	Chicken Extract, Processed Starch	Chicken Extract, Dextrin	Chicken Extract, Dextrin, Starch	Chicken Extract

#### Uses

- ◎ Supplements
- ◎ Drinks
- ◎ Sports related food & drinks

#### Quality Standard Composition

	50% powder	40% powder	20% powder	10% powder	10% liquid
Material	Chicken Extract, Dextrin	Chicken Extract, Processed Starch	Chicken Extract, Dextrin	Chicken Extract, Dextrin, Starch	Chicken Extract, Water
Property	Light yellow powder with slight bitter taste	Light yellow powder with slight bitter taste	Light brown powder with original flavor	Light brown powder with original flavor	Light yellow liquid with slight bitter taste
Moisture	Less than 6%	Less than 6%	Less than 6%	Less than 6%	86 ± 3%
Imidazole Dipeptide	Over 50%	Over 40%	Over 20%	Over 10%	Over 10%
Viable count of bacteria	Less than 1,000 pcs/g	Less than 1,000 pcs/g	Less than 1,000 pcs/g	Less than 1,000 pcs/g	Less than 1,000 pcs/g
Heat resistant bacteria	-	-	-	-	Less than 300 pcs/g
Coliforms	Negative	Negative	Negative	Negative	Negative

#### Chemical Analysis Value (/100g)

	50% powder	40% powder	20% powder	10% powder	10% liquid	
Energy	388	383	356	314	52	kcal
Moisture	2.4	3.1	3.9	4.5	87.0	g
Protein	55.4	44.3	50.6	68.6	11.5	g
Fat	0.0	0.1	0.1	0.1	0.1	g
Carbohydrate	41.7	51.1	38.1	9.6	1.3	g
Ash	0.5	1.4	7.3	17.2	0.1	g
Salt equivalent	0.8	2.0	3.8	4.2	0.2	g

#### Other

	50% powder 40% powder	20% powder 10% powder	10% liquid
Quantity	500g, 10kg	1kg, 10kg	1kg, 15kg
Shelf life	3 years	1 year	3 years
Storage condition	Keep in room temperature	Keep in room temperature	Keep in freezer (Under -18°C)

\*Numbers are just an analysis example. It does not guarantee the content of the product.

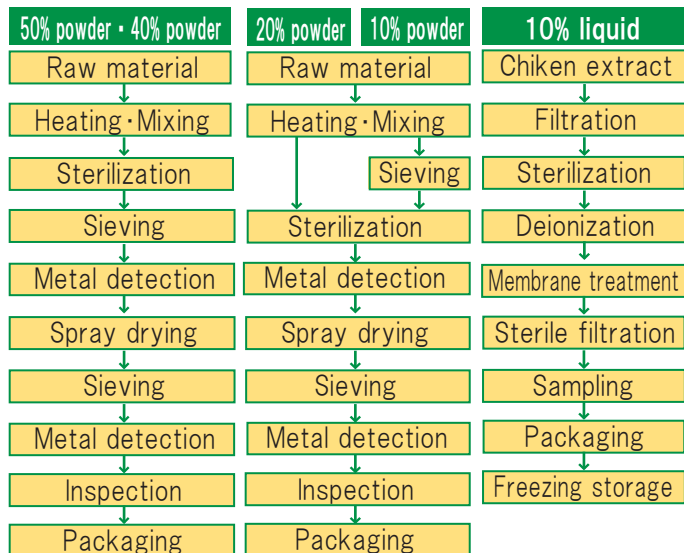
#### Company Information

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### Production Process



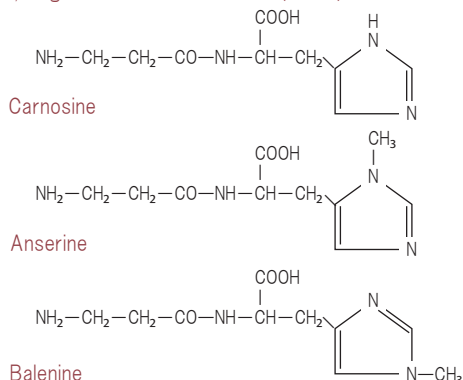
### Distribution of imidazole dipeptide in animals

Anserine and balenine are created by adding a methyl group to carnosine during its metabolism. It is thought that the amount of Histidine-containing dipeptide (HCDP) produced varies depending on the physiological changes of the animal and the ecological environment.

#### HCDP distribution in the body of animals

Type of animal	Carnosine	Anserine	Balenine
	(μ mol/g)		
Human	30.0	1.0	0.0
Pig	12.0	0.7	0.8
Cow	15.0	2.0	0.1
Horse	18.0	0.2	0.0
Sheep	5.0	5.0	0.0
Rabbit	2.0	19.0	0.0
Whale	10.0	0.0	30.0
Snake	5.0	0.0	10.0
Chicken	6.0	18.0	0.0
Tuna	0.0	30.0	0.0
Salmon	0.0	25.0	0.0

P.R. Carnegie, et al. J. Chromatog. 261:153(1983)  
 K. Teahon, et al. Biomed. Chromatog. 6:16-19(1992)  
 H. Abe, Kagaku To Seibutsu 23:809(1985)



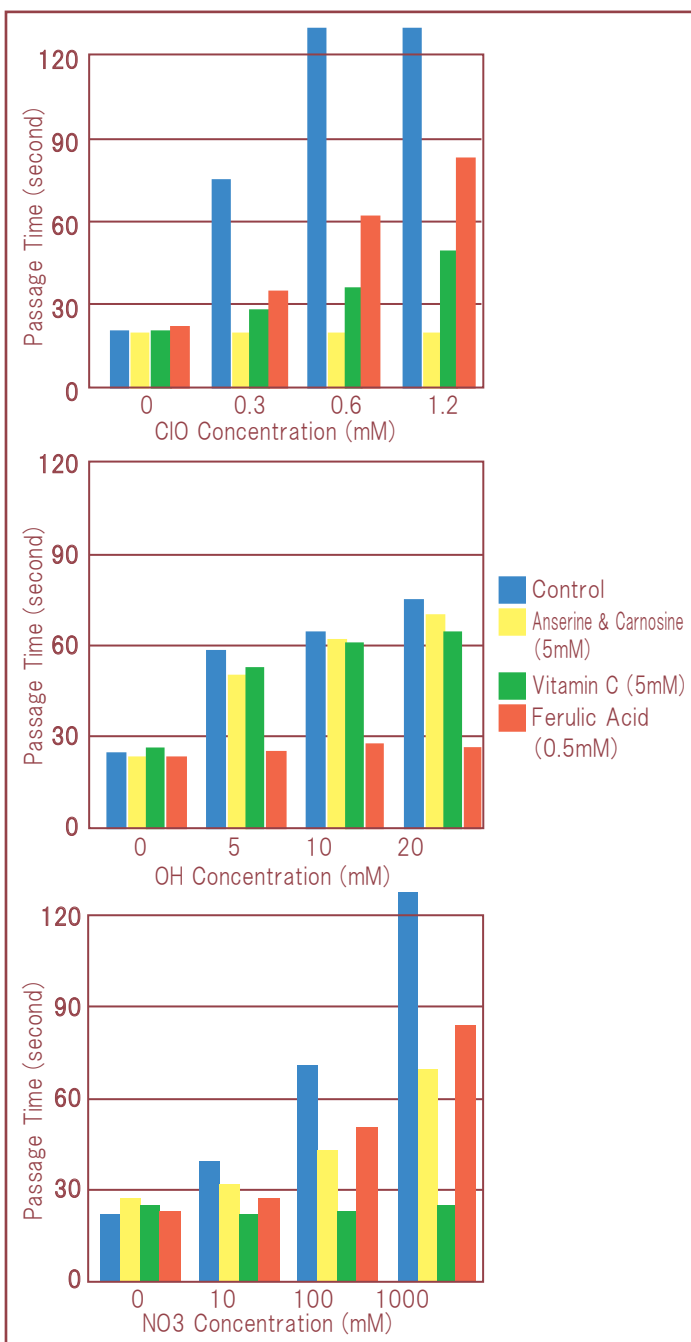
### Product with less odor

Using a patented manufacturing method that combines membrane treatment technology and ion exchange technology, we have created a highly pure product that eliminates odor. High purity means that it does not contain any unnecessary ingredients other than imidazole dipeptide, so everyone can use it with confidence.

### Antioxidant ability



Red blood cells treated with active oxygen have a longer time to pass through the micro-channel, which is a micro-vascular model. Imidazole dipeptide derived from chicken extract, like other antioxidants, is found to prevent this active oxygen-induced inhibition of red blood cell transit.



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